

Patent Application
2771-357 DIV (7486)

SECTION II (Remarks)

Rejection of Claims and Traversal Thereof

In the March 8, 2005 Office Action:

claims 38-58, 60, 62, and 65-68 were rejected under 35 U.S.C. §112, first paragraph; and

claims 38-58, 60, 62, and 65-68 were rejected under 35 U.S.C. §112, second paragraph.

These rejections are traversed and reconsideration of the patentability of the pending claims is requested in light of the following remarks.

Rejection under 35 U.S.C. §112

In the March 8, 2005 Office Action, claims 38-58, 60, 62, and 65-68 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Specifically, the Examiner indicated that the specification fails to teach how one would define a range from an inflection point.

In addition, claims 38-58, 60, 62, and 65-68 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner indicated that the limitation "identifying from said plots an inflection point of each plot as defining a region of operation" was confusing because it is not understood how a point can define a region.

Amended claim 38 recites, *inter alia*:

"wherein a region of operation with respect to independent process variables of temperature, pressure and liquid precursor solution A/B ratio corresponds to the inflection point or a vicinity thereof"
(emphasis showing claim amendment)

Independent claims 56 and 60 have been correspondingly amended.

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Claim 38, as amended, more clearly defines the determination of the region of operation with respect to independent process variables. Specifically, the region of operation "corresponds to the inflection point or a vicinity thereof." Accordingly, a point no longer defines a region, thereby obviating the Examiner's rejection of claims 38-58, 60, 62, and 65-68 under §112, second paragraph. Withdrawal of same is respectfully requested.

With regards to enablement, it is well established as a matter of law that the claimed invention must be enabled so that any person skilled in the art could make or use the invention without undue experimentation. *See, In re Wands*, 8 USPQ2d 1400 (Fed. Cir. 1988).

The instant specification recites:

"Visual inspection of the various curves generated for the dependent variables (including average values for the central and edge regions of the ferroelectric films in the model data matrix of Figure 2) shows a "knee" or inflection point beyond which the curve flattens in the direction of increasing value of the given independent process variables P, T and (A/B)_{solution}. By operating at or in the vicinity of the knee point, the superior PZT material of the invention is produced. The "vicinity" of the knee point will vary with the independent process variable; in the case of the solution A/B ratio and pressure, the vicinity is preferably within + 25% of the knee point, and for the temperature, the vicinity is preferably within + 5% of the knee point.

For the specific data shown in Figure 2, this "knee" point is 1.02 for the solution A/B ratio, 1750 millitorr for the deposition pressure, and 575°C for the deposition temperature." (see page 21, lines 11-21) (emphasis added)

Comparing the foregoing paragraphs to Figure 2, which has been reproduced hereinbelow for ease of reference, it can be seen that not only does the specification thoroughly describe how to determine the inflection points, Figure 2 specifically illustrates the locations of said inflection points (i.e., 1.02 for the solution A/B ratio, 1750 millitorr for the pressure, and 575°C for the temperature). Once the inflection point has been determined, the region of operation "corresponds to the inflection point or a vicinity thereof," wherein "vicinity" is defined at page 21, lines 15-18.

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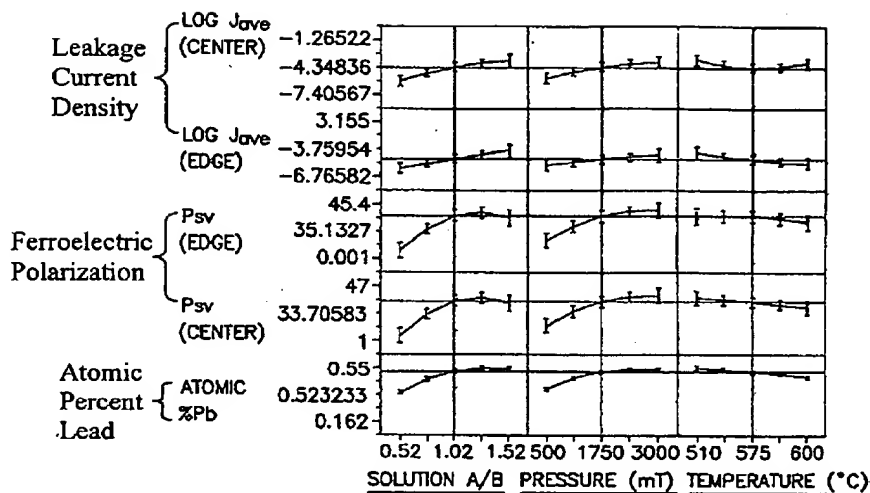


FIG.2

Considered *in toto*, the instant application enables applicants' claimed invention because one skilled in the art could make or use the invention without undue experimentation.

Accordingly, applicants respectfully request withdrawal of the rejection of claims 38-58, 60, 62, and 65-68 under §112, first paragraph.

CONCLUSION


Based on all of the foregoing, pending claims 38-58, 60, 62, and 65-68 are now in form and condition for allowance. If any issues remain, incident to the formal allowance of the application, the Examiner is requested to contact the undersigned attorneys at (919) 419-9350 to resolve same, so that the patent on this application can be issued at the earliest possible time. The Examiner's thorough review of the application is acknowledged with appreciation.

Respectfully submitted,

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